

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A down converter comprising:

at least one switch;

an interface section, which connects the down converter to the at least one switch;

at least one driver circuit is connected to the at least one switch; and

a decoder connected to the at least one switch, wherein the at least one driver circuit and the at least one switch are disposed on a common integrated circuit, and wherein the decoder is connected to a signal ground which is different from a power ground of the common integrated circuit, wherein the at least one driver circuit is a high-current driver circuit, and the at least switch is a power switch.

Claim 2 (Canceled)

3. (Previously Presented) The down converter as recited in claim 1, wherein the interface section is monolithically integrated with the at least one switch.

4. (Currently Amended) ~~The A~~ down converter as recited in ~~claim 1, comprising:~~

at least one switch;

an interface section, which connects the down converter to the

at least one switch;

at least one driver circuit is connected to the at least one

switch; and

a decoder connected to the at least one switch, wherein the at

least one driver circuit and the at least one switch are disposed

on a common integrated circuit, and wherein the decoder is

connected to a signal ground which is different from a power ground

of the common integrated circuit;

wherein the down converter includes a high-side current driver

which is connected to a high-side power switch.

5. (Currently Amended) ~~The A~~ down converter as recited in claim 1, comprising:

at least one switch;

an interface section, which connects the down converter to the
at least one switch;

at least one driver circuit is connected to the at least one
switch; and

a decoder connected to the at least one switch, wherein the at
least one driver circuit and the at least one switch are disposed
on a common integrated circuit, and wherein the decoder is
connected to a signal ground which is different from a power ground
of the common integrated circuit;

wherein the down converter includes a low-side current driver which is connected to a low-side power switch.

6. (Previously Presented) The down converter as recited in claim 4, wherein the high side current driver is connected to a level shifter.

7. (Previously Presented) The down converter as recited in claim 5, wherein the decoder is connected to the low side current driver and to a level shifter.

8. (Previously Presented) The down converter as recited in claim 4, wherein the high-side current driver is a CMOS device.

9. (Previously Presented) The down converter as recited in claim 5, wherein the low-side current driver is a CMOS device.

10. (Previously Presented) The down converter as recited in claim 1, wherein a parasitic inductor between the at least one driver circuit and the at least one switch is approximately 1 nH or less.

11. (Previously Presented) The down converter as recited in claim 1, wherein the integrated circuit is a silicon-based integrated circuit.

12. (Previously Presented) The down converter as recited in claim 1, wherein the integrated circuit is a SiGe-based integrated circuit.